

Marine Bird Abundance Changes In N. W. Washington Inshore Waters

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Marine bird abundance for the southern Strait of Georgia and adjacent waters was first assessed in the 1978-79 Marine Ecosystems Analysis Puget Sound Project (MESA). Since MESA, only the Puget Sound Ambient Monitoring Program's (PSAMP) aerial surveys have provided comprehensive indications of abundance changes. PSAMP has reported dramatic declines for several species, however conclusions are limited based on geographic, methodological and/or temporal considerations. We have nearly completed a two-year study modeled after the MESA study with the goal of providing additional insight into marine bird abundance changes. We censused at least monthly from approximately 100 land-based sites and three ferry runs. First year results indicate a 47% decline in the total number of birds since the 1970's. Species showing abundance declines include surf scoter (-70 %; *Melanitta perspicillata*), western grebe (-81%; *Aechmophorus occidentalis*), brant (-82%; *Branta bernicla*), scaup (-61%; *Athya sp.*), common murre (-91%; *Uria aalge*), and red-necked grebe (-59%; *Podiceps grisegena*). Increases in abundance were noted for pigeon guillemot (+50%; *Cephus columba*), common loon (+56%; *Gavia immer*), and double-crested cormorant (+50%; *Phalacrocorax auritus*). These results agree for the most part with PSAMP study. They also provide fine-scale geographic abundance data and will enhance future marine bird abundance tracking.